Metro Ethernet Network System
With Selective Upstream Pause Messaging

ABSTRACT OF THE DISCLOSURE

[0030] A network system (10). The system comprises a first network node (MN_x), and that node comprises an input (30_{IN}) for receiving a packet, and the node also comprises a buffer (30_{LC}), coupled to the input and for storing the packet. The first network node also comprises circuitry (50) for detecting when a number of packets stored in the buffer exceeds a buffer storage threshold and circuitry, responsive to a detection by the circuitry for detecting that the number of packets stored in the buffer exceeds the buffer storage threshold, for issuing a pause message (60) along an output to at least a second network node. The pause message indicates a message ingress address (60_2) and a message egress address (60_2), where that message ingress address and the message egress address correspond to a network ingress address and a network egress address in a congestion-causing packet received by the first network node. The pause message commands the second network node to discontinue, for a period of time, transmitting to the first network node any packets that have the message ingress address and the message egress address.